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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/262,754 06/20/94 THOMAS

B3M1/0301

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C	CDT001
EXAMINER	
HECKLER, T	
ART UNIT	PAPER NUMBER

2316

DATE MAILED: 03/01/96

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on \_\_\_\_\_ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

A shortened statutory period for response to this action  
Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:  
is set to expire three months(3), or thirty days,  
whichever is longer, from the date of this communication.

- ☒ Notice of References Cited by Examiner, PTO-892.
- ☒ Notice of Draftsman's Patent Drawing Review, PTO-948.
- ☒ Notice of Art Cited by Applicant, PTO-1449.
- ☐ Notice of Informal Patent Application, PTO-152.
- ☐ Information on How to Effect Drawing Changes, PTO-1474.
- ☐

Part II SUMMARY OF ACTION

1. ☒ Claims 1-20 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2. ☐ Claims \_\_\_\_\_ have been cancelled.

3. ☐ Claims \_\_\_\_\_ are allowed.

4. ☒ Claims 1-20 are rejected.

5. ☐ Claims \_\_\_\_\_ are objected to.

6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings  
are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the  
examiner; ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).

12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received  
☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in  
accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

EXAMINER'S ACTION:

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1. Claims 12-15, 18-19 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 12 line 3 "decreases gradually" is vague and indefinite. This is relative terminology. It is not clear what constitutes a gradual decrease of the clock frequency.

In claim 13 line 1 "step" should be inserted after "producing". In line 2 "slow frequency" and "fast frequency" are relative terms. It is not clear what constitutes a slow or fast frequency.

In claim 14 line 4 "step" should be inserted after "producing". In line 5 "slow frequency" and "fast frequency" are relative terms. It is not clear what constitutes a slow or fast frequency.

In claim 15 line 4 "step" should be inserted after "producing".

In claim 18 line 1 "step" should be inserted after "producing".

2. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

3. Claims 1-20 are rejected under 35 U.S.C. § 103 as being unpatentable over Takeda in view of Chen et al and Watts, Jr. et al (5,218,704 supplied by applicant).

Takeda teaches a system comprising a microprocessor (1 in Fig. 14 (a)), a voltage controlled oscillator (41, 43), and a temperature sensor (42) wherein the frequency of the clock signal supplied to the microprocessor varies with the temperature.

Although the temperature sensor is not connected to the microprocessor, it is known in the art to connect the sensor to the microprocessor as taught by Chen (col. 1 lines 23-33) to control the clock frequency based on the microprocessor temperature.

Although the combination of Takeda and Chen do not teach the selection of two or more different frequencies or an activity monitor, this also is known in the art as shown by Watts wherein the activity of a CPU is monitored and a slower clock is selected after a predetermined period of inactivity. It would be obvious

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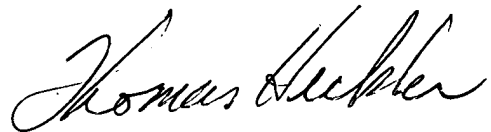
to one skilled in the art to use the teaching of Watts in the system of Takeda and Chen since the purpose of the invention is to lower clock frequency to a processor.

The type of clock used and the controlling of a fan are obvious design choices available to one skilled in the art.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Heckler whose telephone number is (703) 305-9666.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.



THOMAS M. HECKLER  
PRIMARY EXAMINER  
ART UNIT 237

TH  
February 27, 1996